

REMARKS

Claims 1 through 15 were pending in this patent application. Claim 1 has been amended to more clearly define and distinctively claim the invention. Claims 2 and 9 have been cancelled.

Claims 1-7, 9-13 and 15 are rejected under 35 U.S.C. §103 (a) as being unpatentable over Law, et al. (US 5,588,848) in view of Moran (US 6,149,443). With respect to Claims 1 and 2, the Examiner stated that:

“Law discloses a surface mount connector for mounting between two printed circuit boards, the connector comprising: a member (10) having a hollow cross-section, where two sides of said member are substantially parallel and form a first portion (12) and a second portion (not labeled). However, Law does not disclose the relative size of the contact areas. Moran teaches a connector (30) comprising a member having a hollow cross-section, where two sides (32, 34) of said member are substantially parallel and form a first portion (34) and a second portion (32) that is smaller than the first portion, thus providing a larger and more stable base for the connector. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Law having the first portion (12) being larger than the second portion, as taught by Moran, to provide a larger and more stable base for the connector.”

“Regarding claim 2, it is noted that the combination of Law and Moran will result in the connector of Law having a trapezoidal cross-section.”

Claim 1 has been amended to incorporate the limitation from Claim 2 and now recites “[a] surface mount technology connector for mounting between a first printed circuit board having a first contact area and a second printed circuit board having a second contact area, said connector comprising: a member having a hollow trapezoidal cross-section, where two sides of said member are substantially parallel and form a first portion congruent with at least a portion of said first contact area and a second portion that is smaller than said first portion and congruent with at least a portion of said second contact area”. (Emphasis Added).

Applicants concur with the Examiner that the Law, et al. reference does not disclose the relative size of the first and second portions of Applicants’ connector. Moran, beginning on

Col. 3, line 50 and in Figure 5, teaches a spring member 30 in a C-shaped structure having a top piece 32 and a bottom piece 34 connected by a resilient portion 35 on one side and a flap 36 on the other side. Each of the two sides, i.e., the resilient portion 35 and the flap 36 each include a curved portion. The Moran reference describes the spring member 30 as having a C-shaped structure. The spring in Moran is intended to be compressed when secured between two boards 12, 14 as shown in Figure 6. Consequently, the uncompressed height of the spring 30 is greater than the normal separation between the boards when the boards are fully secured together (Col. 3, lines 32-36). Nowhere does Moran disclose or suggest “a member having a trapezoidal hollow cross-section, where two sides of said member are substantially parallel and form a first portion congruent with at least a portion of said first contact area and a second portion that is smaller than said first portion and congruent with at least a portion of said second contact area”. (Emphasis Added).

It is therefore respectfully submitted that Claim 1, as now amended, is patentable over the cited references of Law, et al. in view of Moran.

Claims 3-7 are dependent on Claim 1 and thus are patentable for at least the same reasons given above with respect to Claim 1.

Claim 4 further recites that “said first end abuts said second end to form a seam therebetween of the given width”. In contrast, the Moran reference describes a spring member 30 with a gap 38 between the base portion 34 and the flap 36. Applicants respectfully submit that Claim 4 is patentable over the cited references of Law, et al. in view of Moran.

Claim 10 includes similar limitations as Claim 1 and recites “[a] surface mount technology connector for providing power to flow between a first printed circuit board having a first contact area and a second printed circuit board having a second contact area, said connector

comprising: a member having a hollow trapezoidal cross-section, where a strip of a highly conductive metal having a given width and a given length is bent along four separate edges to form the trapezoidal cross-sectional member having first and second substantially parallel sides and two non-parallel sides, where the first substantially parallel side has a first portion that is congruent with at least a portion of said first contact area and the second substantially parallel side has a second portion that is congruent with at least a portion of said second contact area, and where a first end of the strip forms a part of the first substantially parallel side and a second end of the strip forms the remaining part of the first substantially parallel side and abuts the first end to from a seam there between.” (Emphasis Added). It is therefore respectfully submitted that Claim 10, as now amended, is patentable over the cited references of Law, et al. in view of Moran.

Claims 11-13 and 15 are dependent on Claim 10 and thus are patentable for at least the same reasons given above with respect to Claim 10.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law, et al. and Moran, and further in view of Pereira, et al. (US 6,039,616). The Examiner stated that “Law, as modified, discloses substantially the claimed invention except for the layer of solder. Pereira teaches the use of a layer of solder (30) disposed in a connector (10) to accelerate the soldering/connection process. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the connector of Law with a layer of solder, as taught by Pereira, to accelerate the soldering/connection process.”

Claim 8 is dependent on Claim 1 and thus is patentable for at least the same reasons given above with respect to Claim 1. Claim 14 is dependent on Claim 10 and thus is patentable for at least the same reasons given above with respect to Claim 10.

CONCLUSION

Based on the above, Applicants respectfully submit that all pending claims, Claims 1, 3-8 and 10-15, in the present application are in condition for allowance. Such allowance is respectfully solicited. Applicants respectfully requests that a timely Notice of Allowance be issued in this case. If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 739-2800.

Respectfully submitted,



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